



# STIC EIC 2100

## Search Request Form *101286*

Today's Date:

*8/15/03*

What date would you like to use to limit the search?

Priority Date: *5/4/2001*

Other:

Name *Leslie Wank*

AU *2177* Examiner # *78953*

Room # *4D41* Phone *305-3018*

Serial # *09/849,078*

Format for Search Results (Circle One):

PAPER DISK EMAIL

Where have you searched so far?

☒ USP ☒ DWPI ☒ EPO ☒ JPO ☒ ACM ☒ IBM TDB  
☒ IEEE ☐ INSPEC ☐ SPI ☐ Other

Is this a "Fast & Focused" Search Request? (Circle One) ☒ YES ☐ NO

A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2100 and on the EIC2100 NPL Web Page at <http://ptoweb/patents/stic/stic-tc2100.htm>.

What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.

Topic: Regulatory management system - produces and submits compliance reports to Agencies.

Search for:

*emission*

*formulas for Hydrocarbon emissions from tanks*  
*Hydrocarbon emissions fr. internal combustion engines*  
*fr. External combustion engines*

*glycol dehydration emissions*

*flash emissions caused by transferring high pressure liquid*

*loading loss emissions*

STIC Searcher *T. George Esterheld*

Phone *308-7795*

Date picked up *8/15/03 9:25am*

Date Completed *8/15/03 3:00pm*





# STIC Search Results Feedback Form

## EIC 2100

Questions about the scope or the results of the search? Contact **the EIC searcher or contact:**

Anne Hendrickson, EIC 2100 Team Leader  
308-7831, CPK2-4B40

## Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:  Example: 2100

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC2100 CPK2-4B40



Set	Items	Description
S1	1972	(COMPLIANCE OR COMPLY? OR COMPLIANCY OR OBEDIENCE OR REQUIREMENT?) (3N) (REPORT? OR BRIEF? OR INFORMATION OR RECORD? OR DOCUMENT? OR FILE?)
S2	1298482	EMISSION OR EMIT OR EMITTED OR EMITTING OR EMITS OR (GIVE? OR SEND?) ( )OUT OR DISCHARG? OR AIR( )POLLUTION
S3	3634673	CALCULAT? OR COMPUT? OR FIGURE? OR FIGURING OR MEASUR?
S4	2425183	FORMULA? OR VALUE? OR EXPRESSION? OR SCHEME? OR TECHNIQUE? OR ALGORITHM? OR RULE?
S5	235006	HYDROCARBON? ? OR HYDROCARBONACEOUS OR HYDROCARBONIC OR HYDROCARBONOUS OR VOC OR VOLATILE( )ORGANIC( )COMPOUND?
S6	917436	TANK OR TANKS OR CONTAINER?
S7	163381	INTERNAL( )COMBUSTION( )ENGIN? OR PISTON( )ENGIN? OR DIESEL?
S8	987	EXTERNAL( )COMBUSTION( )ENGIN? OR STEAM( )ENGIN?
S9	68	GLYCOL( )DEHYDRATION OR DRYING( )NATURAL( )GAS
S10	211	FLASH( )EMISSION?
S11	1868015	TRANSFER? OR MOVE OR MOVING OR CONVEYANCE
S12	2524	HIGH( )PRESSURE( )LIQUID
S13	0	LOADING( )LOSS( )EMISSIONS
S14	11936	S2 (2N) S3
S15	11936	S14 AND S2
S16	75	S15 AND S5
S17	885	S15 AND S6
S18	166	S15 AND S7
S19	0	S15 AND S8
S20	0	S15 AND S9
S21	0	S15 AND (S10 (3N) S11)
S22	2	S10 (3N) S11
S23	1105	S16 OR S17 OR S18 OR S22
S24	0	S23 AND S1
S25	19	S23 AND IC=G06F?
S26	14855	S2 (5N) S4
S27	1180	S26 AND (S5 OR S6 OR S7 OR S8 OR S9 OR (S10 (3N) S11 (3N) - S12))
S28	4	S27 AND IC=G06F?
S29	21	S25 OR S28
S30	21	S29 AND S2

File 347:JAPIO Oct 1976-2003/Apr(Updated 030804)  
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File 350:Derwent WPIX 1963-2003/UD,UM &UP=200352  
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30/5/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06545587 \*\*Image available\*\*  
APPARATUS AND SYSTEM FOR HEALTH CARE

PUB. NO.: 2000-131316 [JP 2000131316 A]  
PUBLISHED: May 12, 2000 (20000512)  
INVENTOR(s): NAGATA HIDEKI  
SONEZAKI SHUJI  
APPLICANT(s): TOTO LTD  
APPL. NO.: 10-319982 [JP 98319982]  
FILED: October 22, 1998 (19981022)  
INTL CLASS: G01N-033/493; A47K-017/00; **G06F-019/00**

ABSTRACT

PROBLEM TO BE SOLVED: To provide information which is fully usable for health care from bodily wastes by a method, wherein continuous living-body information is processed and provided for a plurality of users, in such a way that it can be used by every user as data for health care.

SOLUTION: A control unit 200 is constituted of a body, which is separate from a Western-style toilet stool 100 so as to be installed on a floor surface. The control unit 200 and a urine collecting unit 300 are connected by a urine conveyance pipe 202 which conveys collected urine. The urine conveyance pipe 202 fulfills a role in **discharging measured** urine to the Western-style toilet stool 100 from the control unit 200. Also a feed water pipe 204 which supplies cleaning water is connected to the control unit 200 from a cleaning-water **tank** 106 at the Western-style toilet stool 100. The urine conveyance pipe 202 and the feed water pipe 204 are connected to the control unit 200 via a selector valve. When the selector valve is changed over, either the urine or the cleaning water which is collected inside the control unit 200 is supplied.

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30/5/5 (Item 5 from file: 347)  
DIALOG(R)File 347:JAPIO  
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05072999 \*\*Image available\*\*  
LIQUID TRANSFER DEVICE

PUB. NO.: 08-028499 [JP 8028499 A]  
PUBLISHED: January 30, 1996 (19960130)  
INVENTOR(s): MATSUI HIDEHIKO  
APPLICANT(s): ISHIKAWAJIMA HARIMA HEAVY IND CO LTD [000009] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 06-162506 [JP 94162506]  
FILED: July 14, 1994 (19940714)  
INTL CLASS: [6] F04F-001/18; B67D-005/08; F04B-013/00; **G06F-017/00** ;  
G21F-009/04; G21F-009/04; B67D-005/50  
JAPIO CLASS: 24.1 (CHEMICAL ENGINEERING -- Fluid Transportation); 23.1 (ATOMIC POWER -- General); 32.5 (POLLUTION CONTROL -- Radioactive Waste Treatment); 45.4 (INFORMATION PROCESSING -- Computer Applications)

ABSTRACT

PURPOSE: To improve quantitative supply by calculating liquid transfer flow quantity from a **tank** level variation and a **calculated discharge** flow quantity and thus regulating the driving air low quantity on the basis of the comparison with a set flow quantity and so transferring with high accuracy in accordance with a demanded low quantity.

CONSTITUTION: A set **discharge** flow quantity QS per unit time is inputted

in advance to a comparative calculation means 17 by a liquid transfer flow quantity setting means 18. Driving air is sent to an air-lift pump 3 from a driving air supply system 5, so that transfer of stored liquid R from a **tank** 1 is started. A driving air flow quantity is detected by a driving air flow quantity meter 6, and a **calculated discharge** flow quantity QC is calculated from performance characteristic pump 3 by a **calculated discharge** quantity calculation means 12. The transfer is thus continued for a specific time. When a timer 16 turns on after lapse of a specific time, a correction **discharge** flow quantity QC and a **tank** level variation by a transfer flow quantity correction means 15, so that the comparison with a set **discharge** quantity QS is made by a comparative calculation means 17. When a low quantity difference is recognized, the opening of a regulation valve 7 is regulated via an air flow quantity control means 19 and so the driving air low quantity is increased/decrease.

30/5/6 (Item 6 from file: 347)  
DIALOG(R) File 347:JAPIO  
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04976762 \*\*Image available\*\*  
SUPERCHARGING PRESSURE CALCULATING METHOD AND INTAKE SYSTEM DESIGNING  
METHOD IN ENGINE EQUIPPED WITH MECHANICAL SUPERCHARGER

PUB. NO.: 07-269362 [JP 7269362 A]  
PUBLISHED: October 17, 1995 (19951017)  
INVENTOR(s): YANO YASUhide  
NAKAGAWA TADASHI  
APPLICANT(s): MAZDA MOTOR CORP [000313] (A Japanese Company or Corporation)  
, JP (Japan)  
APPL. NO.: 06-064117 [JP 9464117]  
FILED: March 31, 1994 (19940331)  
INTL CLASS: [6] F02B-033/00; **G06F-017/50**  
JAPIO CLASS: 21.2 (ENGINES & TURBINES, PRIME MOVERS -- Internal  
Combustion); 45.4 (INFORMATION PROCESSING -- Computer  
Applications)

#### ABSTRACT

PURPOSE: To improve supercharging pressure computation accuracy by seeking the condition that makes intake flow and **discharge** flow **computation values** mutually equal and also these values and delivery flow given by supercharging characteristic equal under the terms of identical pressure ratio and engine speed and finding the supercharging pressure under this condition.

CONSTITUTION: An intake system, excluding a mechanical supercharger 1, is made into models as a combination of sub-models of a pipe model, a **container** model, etc., and quantity of state of pressure, flow, temperature, etc., of respective sections regarding the intake mode models are computing-processed. The supercharger 1 is made into a model of two **containers** of intake and delivery sides and intake and delivery flows are computed in accordance with relational expression of the quantity of state at the joint parts of respective **containers** and intake pipes per model. A condition under which flow computed values and the delivery flows given by supercharger characteristic data indicating the characteristic of the supercharger itself becomes equal under the terms of identical pressure ratio and engine speed is sought and the supercharging pressure and other quantity of state are found by repeating such process by each certain assuming time until the quantity of state converges.

30/5/9 (Item 3 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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014870763  
WPI Acc No: 2002-691469/200274

XRAM Acc No: C02-195334  
XRPX Acc No: N02-545563

**Determination of concentration of at least one analyte in a test sample involves mixing the sample with a single reagent, irradiating the mixture and calculating the concentration of the analyte**

Patent Assignee: SUNDREHAGEN E (SUND-I)

Inventor: SUNDREHAGEN E

Number of Countries: 099 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200244721	A1	20020606	WO 2001N0480	A	20011130	200274 B
AU 200223166	A	20020611	AU 200223166	A	20011130	200274
US 20030077596	A1	20030424	WO 2001N0480	A	20011130	200330
			US 200219866	A	20020807	

Priority Applications (No Type Date): NO 20006130 A 20001201

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200244721 A1 E 78 G01N-033/53

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

AU 200223166 A G01N-033/53 Based on patent WO 200244721

US 20030077596 A1 C12Q-001/68

Abstract (Basic): WO 200244721 A1

NOVELTY - Determination of concentration of at least one analyte in a test sample or an aliquot of a test sample of a complex biological fluid involves mixing the sample or aliquot of the sample with one single reagent to form a mixture, irradiating the mixture with polarized light, measuring the polarization of the **emitted** light and **calculating** the concentration of the analyte.

DETAILED DESCRIPTION - Determination of concentration of at least one analyte in a test sample or an aliquot of a test sample of a complex biological fluid involves:

(i) mixing the sample or aliquot of the sample with one single reagent such as a solid, solution or premixed solution to form a mixture

(ii) irradiating the mixture with polarized light which permits the excitation of the fluorescent molecules

(iii) measuring the polarization of the **emitted** light, and

(iv) calculating the concentration(s) of the analyte(s).

The reagent is provided in one single **container** or compartment of a **container** and no other reagent is added during the performance of the method. The reagent further comprises at least one type of binding molecule with specific affinity for at least one of the analytes and either fluorescent moieties covalently linked to the binding molecules or fluorescent analogs, fluorescent fragments or fluorescent derivatives of the analyte(s).

INDEPENDENT CLAIMS are also included for:

(1) A reagent for carrying out the method comprising at least one type of binding molecule with specific affinity for at least one of the analyte. The reagent further comprises fluorescent moieties covalently linked to the binding molecules or fluorescent analogs, fluorescent fragments or fluorescent derivatives of the analyte(s); and

(2) Kit for carrying out the method comprising at least one **container**. The **container** (s) or compartment of the **container** (s) contains one single reagent, preferably in a fluidal state. The reagent comprises at least one fluorescence-labeled specific binding molecules towards the analyte(s) to be measured or a fluorescence-labeled analog or fluorescent fragment or fluorescent derivative of the analyte(s) as well as device for obtaining the extract volume(s) of the complex biological fluid to be tested and that is needed in order to perform

the method adequately.

USE - For the determination of concentration of at least one analyte in a test sample or an aliquot of a test sample of a complex biological fluid, particularly for the determination of concentrations of clinically related substances in samples of biological material from living organism (claimed) e.g. plants, insects, birds and animals such as mammals (e.g. primates or humans).

ADVANTAGE - The method involves use of stable, durable reagents; is carried out in very few (preferably just one single **container**); does not require any significant pipette work. The method can be carried out on blood tests after or with simultaneous lysis of the blood cells. The method is a sensitive specific measurement method. The method is carried out at constant temperature by use of correction algorithms empirically generated by temperature's influence on test solutions with known concentration of the analyte.

pp; 78 DwgNo 0/8

Title Terms: DETERMINE; CONCENTRATE; ONE; ANALYTE; TEST; SAMPLE; MIX; SAMPLE; SINGLE; REAGENT; IRRADIATE; MIXTURE; CALCULATE; CONCENTRATE; ANALYTE

Derwent Class: B04; S03

International Patent Class (Main): C12Q-001/68; G01N-033/53

International Patent Class (Additional): G01N-033/48; G01N-033/50;

G01N-033/533; G01N-033/542; G01N-033/567; G01N-033/68; **G06F-019/00**

File Segment: CPI; EPI

30/5/10 (Item 4 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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014702021 \*\*Image available\*\*

WPI Acc No: 2002-522725/200256

XRAM Acc No: C02-148208

XRPX Acc No: N02-413678

**Recycling of organic waste collected from several sources of emission , involves recovering valuable resources by controlled recovering process, so that required amount of recovered valuable resources are obtained**

Patent Assignee: KAJIMA CORP (KAJI )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2002102838	A	20020409	JP 2000302767	A	20001002	200256 B

Priority Applications (No Type Date): JP 2000302767 A 20001002

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2002102838	A	14	B09B-005/00	

Abstract (Basic): JP 2002102838 A

NOVELTY - Valuable resources (VR) (8A,8B,8C) which differed from several sources of **emission** , are recovered from collected organic waste (2a,2b,2c) by recovering processes (RP) (7A,7B,7C). Condition, property, and amount of waste material are calculated for every source. A recovery estimator calculates recovery of VR based on calculated value. RP are controlled, so that required amount of recovered VR are obtained.

DETAILED DESCRIPTION - Valuable resources (8A,8B,8C) which differed from several sources (1a,1b,1c) of **emission** , are recovered from collected organic waste (2a,2b,2c) by several recovering processes (7A,7B,7C). The condition, property, and amount of collected waste material are calculated for every source of **emission** . A recovery estimator calculates the recovery of valuable resources based on the condition, property and amount of collected waste material. The recovering processes with respect to the waste material, are controlled for every source of emissions, so that the required amount of the recovered valuable resources are obtained.

An INDEPENDENT CLAIM is included for recycling system of organic

waste. The system comprises a waste material evaluation unit (12) which calculates the condition, property, and amount of collection of waste material from several source of **emission**, an amount **calculation** unit which calculates the requirement amount of recoveries for every valuable resource, and an evaluation unit. The system comprises a recovering process determining unit (14) which determines the recovering process with respect to the waste material. The system treats the waste material of every source of **emission** according to a decided recovering process by recovering process determining unit.

USE - For recycle of organic waste such as animals and plants residue ejected from foodstuffs production residue, agriculture-stock raising-fishery plant, paper manufacture-pulp mill, especially collected from several sources of **emission**.

ADVANTAGE - The organic waste is recycled and the required amount of valuable resources is obtained. Soft switching of recovering process is performed depending upon the output of organic waste and demand quantity of valuable resources. Hence, valuable resources are efficiently recovered from waste material. The amount of valuable resources recovered from every source of **emission** is known (by estimator), hence the amount of waste material removal is calculated for every source of **emission**.

DESCRIPTION OF DRAWING(S) - The figure shows the diagrammatic flow chart of waste material recycling method. (Drawing includes non-English language text).

Several sources of **emission** (1a,1b,1c)

Organic waste (2a,2b.,2c)

Recovering processes (7A,7B,7C)

Valuable resources (8A,8B,8C)

Waste material evaluation unit (12)

Recovering process determining unit (14)

pp; 14 DwgNo 1/16

Title Terms: RECYCLE; ORGANIC; WASTE; COLLECT; SOURCE; **EMIT** ; RECOVER; VALUABLE; RESOURCE; CONTROL; RECOVER; PROCESS; SO; REQUIRE; AMOUNT; RECOVER; VALUABLE; RESOURCE; OBTAIN

Derwent Class: D15; H06; P43; T01

International Patent Class (Main): B09B-005/00

International Patent Class (Additional): C02F-011/00; C05F-017/00;

C10L-003/06; **G06F-017/60**

File Segment: CPI; EPI; EngPI

30/5/21 (Item 15 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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004331251

WPI Acc No: 1985-158129/198526

XRFX Acc No: N85-119132

**Commodity oil metering data processing and transmission unit - has gas emission correction calculator with inputs from pressure drop sensor and light hydrocarbon fraction calculator**

Patent Assignee: VOLGO-URAL GASES (VOLG-R)

Inventor: GALYAN N N; SHCHERBINA V E; SHVETS V A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1129625	A	19841215	SU 3666868	A	19831129	198526 B

Priority Applications (No Type Date): SU 3666868 A 19831129

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
SU 1129625	A		27		

Abstract (Basic): SU 1129625 A

New circuit components are thus pressure drop sensor (50), pressure sensor (51), light **hydrocarbon fraction calculator** (52), gas **emission correction calculator** (53), pulse subtracter (54), adder



(55), compressibility factor calculator (56) and compressibility correction calculator (57).

Pressure drop sensor (50) measures the pressure drop across valve (59) and applies its signal to the first input of calculator (53), which also receives the output pulse train of adder (5) and a constant gas **emission** factor from **calculator** (52), and uses them to **calculate** the gas **emission** correction. This is applied to the subtracter, also connected to adder (5). The subtracter's output is used by adder (55), connected to the compressibility correction calculator, whose input is connected to the compressibility factor calculator, in turn connected to temperature sensor (7).

USE/ADVANTAGE - Increased accuracy of metering is the distinguishing feature of the unit, intended for use in the gas and oil industry to process liquefied **hydrocarbon**, gas condensate, oil and petroleum product metering information. The improvement results from provision of facilities to take into account oil compressibility and gas **emission** during high-pressure transport and pumping.

Bul.46/15.12.84. (27pp Dwg.No.1/18)

Title Terms: COMMODITY; OIL; METER; DATA; PROCESS; TRANSMISSION; UNIT; GAS;  
**EMIT** ; CORRECT; CALCULATE; INPUT; PRESSURE; DROP; SENSE; LIGHT;  
**HYDROCARBON** ; FRACTION; CALCULATE

Derwent Class: T01

International Patent Class (Additional): **G06F-015/46**

File Segment: EPI